



ASSOCIATION OF STATE FLOODPLAIN MANAGERS, INC.

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TESTIMONY

Association of State Floodplain Managers, Inc.

before the
House Committee on Transportation and Infrastructure
Subcommittee on Water Resources and the Environment

Proposals for a Water Resources Development Act of 2008

presented by:
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INTRODUCTION

The Association of State Floodplain Managers, Inc. (ASFPM), and its 26 Chapters represent over 11,000 state and local officials and other professionals who are engaged in all aspects of floodplain management and hazard mitigation, including management, mapping, engineering, planning, community development, hydrology, forecasting, emergency response, water resources, and insurance. All ASFPM members are concerned with working to reduce our nation's flood-related losses. Our state and local officials are the Federal government's partners in implementing programs and working to achieve effectiveness in meeting our shared objectives. Many of our members are designated by their governors to coordinate the National Flood Insurance Program (NFIP), many others are involved in the administration of and participation in the Federal Emergency Management Agency's (FEMA's) mitigation programs, while others are involved in the array of flood loss reduction programs/projects made available through the U.S. Army Corps of Engineers (USACE). For more information on the Association, please visit <http://www.floods.org>.

While it has only been a few months since the 2007 Water Resources Development Act (WRDA) was passed, it is never too early to look ahead. This past fall, the ASFPM Foundation, in conjunction with the ASFPM held the second Gilbert F. White National Flood Policy Forum which was themed "Floodplain Management 2050." Attendees included engineers, planners, real estate professionals, insurance experts, leading British subject matter experts, and senior agency staff from USACE, FEMA, USGS, NRCS and other entities. The forum challenged attendees to think broadly about the adjustments we will need to undertake to successfully manage flood risk and flood losses in the not-so-distant future. Factors such as population growth, Federal budgets, catastrophic events like Hurricane Katrina, climate change, and transportation / critical infrastructure, were reviewed in light of current constraints and future trends.

A summary is currently being produced and will be available soon, but in the interim, background materials and presentations can be found on the ASFPM Foundation website at <http://www.floods.org/Foundation/Forum.asp> . Overall, it was concurred that the next 40 years

will be characterized by unprecedented changes in flood risk and a rapid acceleration in threats to vital water based ecosystems. Further, it was determined that based on current water resources policy that the nation is woefully unprepared to effectively deal with these rapidly emerging conditions. As such the ASFPM strongly urges that a 2008 WRDA be a vehicle to start the dialog, investigations, and actions that will adjust water policies based on projections 40 years from now. A future where this nation will add from 100-150 million people to its population, a future where we will have 40% more buildings than we have today, a future where there is a significantly increased pressure to build in high risk areas with attendant pressure on ecosystems. If action is taken now, there is an opportunity for wise land use and sustainable communities. If ignored, our safety, environment, and economy will be undermined.

Thank you for inviting us to offer ideas for a Water Resources Development Act of 2008. The following testimony addresses:

- A. Progress Made in the 2007 WRDA and Critical Issues Contained Therein
- B. Sliding Cost Share Ideas
- C. Eliminating Bias Against Non-Structural Floodplain Management Projects
- D. Interagency Coordination Issues with FEMA
- E. Utility of Flood Plain Management Services (FPMS) and Planning Assistance to States (PAS)
- F. National Water / Flood Hazards Coordinating Entity

A. PROGRESS MADE IN THE 2007 WRDA AND CRITICAL ISSUES CONTAINED THEREIN

The 2007 WRDA contained three very significant policy provisions – the establishment of a Committee on Levee Safety (which will develop recommendations for a national levee safety program), a requirement to update the *Principles & Guidelines* (P&G) used for USACE project planning, and the establishment of an independent peer review mechanism for project studies.

A national levee safety program is sorely needed. Since the 1917 establishment of the flood damage reduction mission for the USACE, thousands of levees have been constructed. Many of the projects were at least partially USACE funded while some were not. What is now apparent; however, is that many of these levees are nearing the end of their project life and the public has a very poor understanding of the risk of occupying lands they think of as “protected” by these levees. Also, FEMA is implementing a massive updating of its Flood Insurance Rate Maps and is working closely with USACE to identify levees and those that can be certified to provide protection from the minimal 100-year flood event. Given the significant life / safety risks levees pose, it is remarkable that we did not have any comprehensive levee safety mechanism until the 2007 WRDA was passed. We appreciate the Committee’s work to include this very important provision in the 2007 WRDA and urge the Committee to ensure that the national Committee on Levee Safety be established and a national levee safety program be developed as quickly as possible.

- **ASFPM believes that a state administered national levee safety program must be fully integrated with state and local programs of flood risk management, especially floodplain management and dam safety, and should use a state delegation model similar to that used to implement the Clean Water Act. State capability in this area is critical and must be developed, utilizing incentives and disincentives for states to accept program delegation and share in this responsibility.**

ASFPM believes that some basic principles that should be incorporated into a national levee safety program. These principles include:

- The Federal government (USACE as lead) should develop the initial levee inventory in cooperation with states, which must collaborate with local and regional entities in their state.
- Any long term levee program must use the states as a focal point. States are the only

entity that has authority to regulate the design, construction, operation and maintenance of levees. The Federal government can encourage those things and offer incentives, but cannot mandate it.

- Incentives must be built into the program to encourage states to undertake levee safety programs in conjunction with their regional and local governments. Monies states spend on effective levee safety programs will result in reduced Federal tax spending for disaster relief. Thus, incentives could consider that appropriate state expenses could be banked against the non Federal share of future disaster costs in that state.
- Guidance must be developed that establishes criteria and definitions for high, moderate and low risk levees in order to set priorities for the assessment and future mitigation actions. These guidelines should be developed by the National Research Council who can engage various experts and should also reflect any scientific findings such as previous National Academies reports.
- The Federal government should not be performing detailed engineering analysis of levees or designing engineering remedies for non-Federal levees. That is the function of levee owners and sponsors.
- The levee inventory and any follow up assessment and levee safety program must be clearly coordinated with related mitigation programs of the USACE and other Federal agencies such as FEMA, NRCS, Bureau of Reclamation, etc. and especially with the flood mapping programs of FEMA. Additionally this program must be done in collaboration with state programs, which in turn must involve regional and local related programs.
- Federal and State policy groups and Boards must be charged with recommending appropriate levee standards for various levees in the nation. Those standards must be improved to use 500 year levees for protecting urban areas and critical facilities. This moves from the current 1% (100 year) standard generally used, which is inadequate for protecting highly urbanized areas or for critical facilities like hospitals, drinking water, fire stations, etc.
- ASFPM finds that future flood losses can be reduced if levees are never used to protect undeveloped land. Levees may be a viable last resort option for mitigating damages to

existing urbanized areas if properly designed, constructed, operated and maintained, but only if proper warning and evacuation procedures can assure protection of lives for those living at risk behind those levees.

The ASFPM, for many years, has requested that *Principles and Guidelines* (P&G) be updated. Specifically, ASFPM is encouraged that Congress identified six areas where P&G must be updated, including the assessment and incorporation of public safety in the formulation of alternatives and recommended plans, the assessment and evaluation of the interaction of a project with other water resource projects in the region or watershed, and the development of assessment methods that use non-structural approaches to water resources development and management. For example, ASFPM believes that Federal investments in levees should not be made for a structure that provides less than 500-year protection (in urban areas) and the Corps of Engineers planning process of maximizing the National Economic Development (NED) should explicitly incorporate this public safety standard as a lower boundary for Federal investment.

- **ASFPM recommends Congress direct the USACE to seek broad input to the P&G changes, especially to seek input from the state partners who are the primary entities with the authority for land use and other measures to reduce flood damages and costs.**

Independent peer review of project planning and post-construction authorization is another element of the 2007 WRDA that ASFPM supports. We applaud the efforts of this Committee for that progress which we all hope will result in better projects. While we were disappointed the final language in the 2007 WRDA was somewhat watered down, it will now be important this Committee ensure implementation of the measures and monitor the effectiveness thereof.

- **ASFPM urges the Committee to closely monitor USACE implementation of the WRDA 2007 peer review process to determine if further changes are needed for an effective process.**

B. SLIDING COST SHARE IDEAS

The ASFPM has long encouraged consideration of a “sliding” non-Federal, cost share for flood reduction projects undertaken by the USACE. To be effective, programs administered by states and local jurisdictions must recognize that managing flood hazards is not solely the Federal government’s responsibility. The dominant adverse impacts of flooding are at the local level – therefore, flood reduction is a significant responsibility of state and local governments. Public safety is, in fact, the prime function of local and state government. The ASFPM endorses incentives that recognize and encourage state and local programs that are based on sound practices and that exceed the minimum national flood reduction standards, including the minimum provisions of the NFIP. The benefits of a sliding cost-share include:

- Recognizing and rewarding the building of a community’s capability to manage development in its floodplains and watersheds, and thus reduce future flood damages, disaster costs and human suffering;
- Eliminate perverse incentives—Once structural Federal projects are built, communities gain the taxes from development in the “protected” land area. The availability of large Federal cost shares to build the projects, combined with the added Federal relief after a disaster, especially in the form of public assistance to local governments allows locals to gain the benefits, but to “externalize” the costs to the Federal taxpayer. This has seriously undermined state and community actions for taking mitigation responsibility on their own to reduce flood damages and costs. Thus, those communities who did the least to reduce flood damage and flood risk to their citizens are rewarded with Federal relief dollars while those communities that wanted to take action struggled to find funding. Past WRDA bills provided cost shares, but did not reward positive local and state actions;
- Promoting long-term community sustainability by encouraging the implementation of sound floodplain management practices. Communities should not be “rewarded” with a flood reduction project or an even larger share of Federal disaster relief funds if it does little or nothing on its own to, in the long term, reduce its exposure and risk to flooding; and
- Ensuring that Federal tax dollars are carefully spent on long term solutions, where it is

less likely that additional Federal dollars would have to be invested for Operation & Maintenance costs or costs to repair/rebuild/increase the size of flood reduction projects— because of a community’s inaction to account for or prevent future increases in flood levels—makes good economic sense.

- **ASFPM urges Congress to eliminate reverse incentives that foster unwise development, and instead to reward wise use decisions by locals and states.**

- **ASFPM believes that a WRDA 2008 should incorporate a sliding cost share for USACE projects whereby communities, and states who are taking advanced measures to reduce flood losses and enhance the natural functions of floodplains are given an incentive through a reduced cost share vs. communities and states who do nothing.**

The ASFPM envisions that a sliding cost share could be based roughly on the framework that is used under the NFIP’s Community Rating System (CRS) program, and that the USACE and the FEMA would work together to design and implement such an incentive based evaluation. We support the concept that the determination of the cost share be based on a community’s floodplain management program, implementation of existing all hazard mitigation plans and/or floodplain management plans as required by the 1996 WRDA Section 202. Furthermore, it could be measured, at least in part, in a manner that is consistent with the approach outlined in the CRS.

C. ELIMINATING BIAS AGAINST NON-STRUCTURAL FLOODPLAIN MANAGEMENT PROJECTS

Non-structural projects are at an inherent disadvantage to structural flood control projects in the USACE project development / implementation process. There are several areas where this bias should be eliminated.

First, the non-Federal cost share for non-structural projects should be equal to that of

FEMA's cost share for a non-structural mitigation project, and lower than the non-Federal cost share of a USACE structural project. The rationale for this is as follows.

- Quite often non-structural projects are lower in cost than their structural counterpart. As such, even though the Federal percentage is higher, the net Federal cost would be the same or lower with this new cost share.
- A significant, unaccounted potential cost to the USACE of a structural project is the cost associated with their failure and subsequent repair after a flood disaster is declared (PL84-99). Non-structural projects do not have the same potential for these types of damages and costs.
- Non-structural projects generally do not transfer flood damages from the protected area to an unprotected area. This practice of causing adverse impacts on other properties should be accounted for and might lead to increased cost to the Federal government.
- Often non-structural projects involve little or no residual risk associated with structural failure or design flood exceedence, which can lead to catastrophic costs to the Federal taxpayers, such as was seen in New Orleans.
- Finally, non-structural projects often promote protection and enhancement of the environmental and recreational outcomes bringing additional benefits to the nation. Inherently non-structural projects are multi-objective versus being single purpose.

ASFPM believes that these benefits individually and cumulatively argue for a differential cost share.

- **WRDA 2008 should establish a cost share for non-structural projects of 75-25 which is equal to what FEMA uses for its non-structural projects.**

Clearly, this concept could be integrated into a sliding cost share strategy.

Second, property/building acquisition projects (non-structural) by the USACE are inconsistent with FEMA programs in a post-disaster environment. In such a scenario, FEMA

allows the community to offer the owner either pre- or post- disaster market value of the property. The USACE can only offer the owner the actual market value of the property at the time of negotiation (post-disaster market value). So, after a Katrina type disaster this means the difference in value of a complete residential property (house and lot), compared to just a vacant lot (because the house was destroyed). This makes similar Federal programs sometimes working in the same community at the same time inconsistent in regard to negotiating with and purchasing property from the owner and discourages flood mitigation. It is very difficult to explain this discrepancy to owners, and it can result in inequities in terms of funds to owners in the FEMA programs versus those in a USACE project. Remember, in all cases the acquisition must be cost-effective to the nation.

- **WRDA 2008 should give the USACE the ability to follow the same acquisition / demolition costing procedures as FEMA if that is most desirable in a particular situation and saves future costs through mitigation.**

D. INTERAGENCY COORDINATION ISSUES WITH FEMA

There are a number of places where policies of the USACE and FEMA intersect. Sometimes those policy nexus results in unintended negative consequences. ASFPM has been involved in numerous national policy dialogues with partner organizations in the past year. These have included the Flood Risk Policy Summit involving 60 experts from many different groups such as homebuilder, realtors, lenders, environmental organizations, academia and others. We co-sponsored this Summit with the National Association of Flood and Stormwater Management Agencies (NAFSMA), with strong support from the USACE and FEMA. The same groups held a National Levee Safety Summit in St. Louis in February 2008, attended by 500, including many levee owners. The following suggestions come from the Flood Risk Policy Summit and the Levee Safety Summit:

- *Public safety must become a default standard in determining the design of and priorities for flood mitigation projects above and beyond the benefit/cost analysis and any other*

objectives in the NED or P&G. We cannot in good conscious be designing and building flood mitigation projects with Federal tax dollars that result in (avoidable) loss of life.

- *Levees must be designed to protect urban areas and critical facilities to the 500 year flood*
- *Federal monies should not place people and structures at risk, nor contribute to the increased flood risk of other structures and people. Many agencies will spend billions of taxpayer's monies in our efforts to rebuild the Gulf coast. This includes the Corps of Engineers, FEMA, HUD, EDA, EPA and DOT. It is imperative those agencies do not increase flood risk, or cause flood risk to be transferred to others through their actions. Federal Executive Order #11988 directs all Federal agencies to analyze their actions to avoid increasing flood risk as they assist to build, finance or provide technical assistance. We urge this Committee to condition each program authorization on compliance with this Executive Order.*
- *Operation and Maintenance (O&M) of flood control structures must be ensured through strong Federal and state oversight. No Federal assistance for flood control structures should be provided without upfront assurance of financial capability of project sponsors for ongoing O&M of the structure.*
- *The O&M requirements of the PL 84-99 program must be tied to the criteria for certifying levees under FEMA's flood mapping program.*
- *Identify residual risk structures and lands that will be flooded when levees fail or overtop; and require flood insurance for structures in those areas.*
- *Integrate planning and program requirements for flood mitigation and water resource planning and projects between the two agencies, using holistic, watershed approaches.*
- *Require a level of protection commensurate with the risk in the USACE and FEMA programs that map and manage flood risk, especially for flood control structures where the consequence of failure is catastrophic.*
- *Flood control structures should not be built with Federal dollars in communities which do not join the NFIP, nor should those communities be eligible for Federal disaster assistance for damage to public infrastructure.*
- *Levees should be considered an option of last resort and used only to protect existing*

communities. Levees should not be used to protect undeveloped land with the speculation new development will be placed at risk behind those levees

E. UTILITY OF FLOOD PLAIN MANAGEMENT SERVICES (FPMS) AND PLANNING ASSISTANCE TO STATES (PAS)

The USACE's Flood Plain Management Services Program is a Continuing Authority program authorized under Section 206 of the 1960 Flood Control Act. The program provides funding to each district office to provide technical assistance and coordination with States, local communities, Native American Tribes and other entities. Coordination and technical assistance is provided to assure wise use of the nations flood plains for new development and assistance in mitigating future flood hazards.

The program also provides for specific special studies for a wide range of flood related projects. Typical special studies would include flood plain analyses for communities where there is no existing data, flood preparedness plans, hazard mitigation plans and flood mitigation conceptual plans where other USACE programs are not justified. These studies generally promote a more non structural approach to flood hazard mitigation.

Based on discussions with communities there is a huge increase in interest to address flood risk brought on by the Gulf Coast hurricanes. All communities are extremely concerned about reevaluating their flood risk and many are requesting levee certification. This request is important in two aspects. First, as a nation, we do not even have a complete inventory of levees and also do not know the safety level that these levees provide. Second, providing technical assistance with certification of levees in the Gulf Coast and throughout the nation (the State of California is currently facing significant issues with levees and certification and recognizes it needs to accept responsibility to address the matter) will help communities and states determine where future needs are and improve the quality of our nations flood maps. Without counting levee certification the USACE FPMS program needs could be over \$20 million dollars in FY 08.

- ▶▶ **ASFPM urges the Committee to consider a substantial increase in the annual authorization ceiling for this program to at least \$50 million in the 2008 WRDA.**

- ▶▶ **ASFPM urges the Committee to direct the USACE to explore how it can utilize the FPMS program to assist communities and states to evaluate existing levees and assist with certification of them as safely providing protecting to a specific flood level. Additionally the USACE should be encouraged to work closely with FEMA to utilize this information to help develop more accurate flood maps for the nation that reflect the location and safety level of existing levees.**

Section 22 of the WRDA of 1974, as amended, provides authority under the Planning Assistance to States (PAS) program for the Corps of Engineers to assist the States, local governments, and other non-Federal entities, in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. Federal allotments for each state or tribe from the nation-wide appropriation are limited to \$500,000 annually, but typically are much less. Individual studies, of which there may be more than one per state or tribe per year, generally cost \$25,000 to \$75,000.

One innovative use of PAS funds is currently occurring in Ohio where the Huntington District has initiated a project called the Silver Jackets that focuses on comprehensive solutions to flooding issues through the coordination of Federal agencies and pooling of resources. Currently, the City of Marietta is a pilot community which was flooded severely in September 2004 and then again in January 2005. One of the needs identified is to do a comprehensive risk assessment and vulnerability analysis on flood prone structures in the downtown area and suggest some possible non-structural and structural solutions to mitigate against future flooding. It is important to note this effort employs a comprehensive planning process to involve all sectors of the public and is led by the community, with the state and Federal agencies providing assistance.

Every year there are more requests for PAS assistance than funds appropriated, leaving many

needs unmet.

▶▶ **ASFPM urges the Committee to consider an increase in the PAS program's annual authorization ceiling to at least \$30 million.**

▶▶ **The ASFPM supports the President's budget for FY 2008 of \$10 million for the Corps of Engineers to move forward with its inventory of the nation's levees and their status.**

F. NATIONAL FLOOD HAZARDS COORDINATING ENTITY

Due to unprecedented population growth and the real threat of significant climate change there is real concern as to whether our current programs of flood risk management will be adequate to address these future threats. ASFPM believes the time is ripe for the formation of an interagency task force led by USACE in partnership with all involved Federal agencies and academic partners to lead scenario based planning efforts that forecast and evaluate how the nation should begin to adjust to meet these pending needs. One trend that we cannot ignore – and will eventually be among the most influential is that of limited resources. As our national debt grows along with non-discretionary programs, ways must be found to ensure existing programs work together to achieve a common goal. To that end, such a coordinating entity could also serve to develop and implement national flood loss reduction goals and policies.

▶ **ASFPM recommends this Committee directs USACE to work with FEMA and other Federal agencies to re-establish the Interagency Floodplain Management Task Force to coordinate Federal agency activities in flood risk management.**

CONCLUSION

Our system of identifying and implementing projects is broken. Outdated statements of Federal interest and lack of funding capability at the Federal level is leading to the creation of a large back log of potential projects that for the most part will never be implemented. This action is providing local officials with a false sense of hope that if they are simply patient enough the Federal government will fix their problem. This process is leading to an inordinate number of studies that while interesting to read will never be implemented. We are navigating towards new Federal partnerships and projects by looking in the rear view mirror. It is time to re-direct our attention to looking forward to the contemporary problems facing the nation. As such we urge Congress in WRDA 2008 to focus heavily on activities that will allow the nation to retool and meet these new challenges vs. adding yet more projects that will not be built.

The ASFPM will continue to work vigorously to reduce flood losses in the United States. All resources must be brought to bear on flooding problems – not just those of the USACE or FEMA. In considering and ultimately adjusting policy oriented provisions in a WRDA, this Committee can take positive steps in reducing our nation's flood losses. ASFPM appreciates this opportunity to testify before the Committee.

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